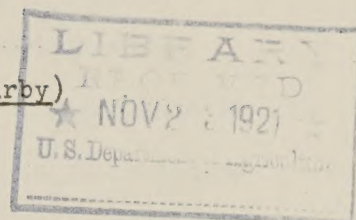


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THE WHEAT MIDGE (Diplosis tritici Kirby)



The wheat midge is an insect closely related to the Hessian fly, and, like it, feeds upon the wheat plant. While the Hessian fly attacks the stalk, the wheat midge or red weevil, as it is commonly called, often does serious damage to the maturing heads. It is supposed to be an imported pest, having first been noted as injurious in Suffolk, England, in 1995. It is said that it was introduced into America near Quebec, where it was first noted in 1819. It was first observed in the United States in northwestern Vermont in 1820. It did not become very destructive, however, until 1828, but from that time until 1835 it increased in such numbers as to cause abandonment of wheat-growing in some localities in northern New England. Serious damage was reported by this pest every few years until 1860, being most severe in 1854, in which year Dr. Fitch, of New York, estimated that the loss in that State alone was \$15,000,000. Since that time no widespread injury has occurred, though local outbreaks are frequent, and the pest has spread to the Gulf States and westward to Iowa, Minnesota, and Arkansas.

The adult fly is a small, two-winged insect about an eighth of an inch long, of a yellow or orange color. It appears about the middle of June and lays its eggs "in a small cavity at the summit of, and formed by a groove in, the outmost chaff covering the incipient kernel." It hatches in about a week and the maggot burrows into the forming

2

kernels. The maggots of the wheat midge are of a reddish color and when a wheat head is badly infested the maggots within cause it to assume a reddish tinge. On this account the insect is often called the "red weevil". When full grown the maggots enter the ground and usually form cocoons, in which they pass the winter in the pupal stage, though they often hibernate without such protection.

There are indications that more than one species are involved and there may be two broods under favorable climatic and meteorological conditions.

The wheat midge not only attacks wheat, but sometimes causes injury to rye, barley, and oats.

Plowing infested fields in the fall so deeply that the midges are unable to reach the surface of the soil in the spring is by far the best means of controlling this pest, while burning the stubble previous to plowing, and a rotation of the crop, may also be of considerable aid.

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1. The first part of the document is a list of names and titles, including "The Hon. Mr. Justice" and "The Hon. Mr. Justice".